Key Biodiversity Areas take a big step forward

These special areas can help provide a roadmap for effective conservation action.

Canada’s ambitious commitment to protecting 30% of its lands and waters by 2030 comes with some big challenges, not the least of which is knowing where to start in a country stretching across over 15 million km$^2$ of land and sea. That’s why the official launch of the Key Biodiversity Areas (KBA) program in Canada comes at a critical time for nature conservation.

We were excited to officially launch the Canadian KBA program at the Canadian Museum of Nature in early October, where federal Environment Minister Steven Guilbeault joined us to talk about how KBAs can help with the important tasks facing Canada as a member of the “High Ambition Coalition” signatories to the Convention on Biological Diversity.

Guided by a global set of standards, the KBA program looks for sites that meet criteria such...
as being home to species found in few (or no) other places, being a place where wildlife gathers for feeding, resting, or breeding, or being large intact and roadless areas that are strongholds for species that need a lot of space, such as caribou or polar bears.

Seventy-three new KBAs were unveiled at the Ottawa event. Almost 1,000 more potential sites are still being assessed, representing exciting opportunities to retain critical places for nature, ranging from small pockets of nature in urban centres to vast intact wild areas. KBAs themselves do not offer any legal protection. Instead, they are a way of identifying places where we need to focus conservation attention – whether that is community stewardship or official protected status.

WCS Canada’s KBA team (from left) Peter Soroye, Justina Ray, Chloe Debyser, Meg Southee, Robyn Rumney, Angela Leung, Dan Kraus, Ciara Raudsepp-Hearne. Photo: Martin Lipman.

We profile just a few of the newly approved sites on our SHAPE of Nature blog. You can also find out about sites on the revamped KBACanada.org website, which includes an interactive map of Canada’s evolving KBA landscape.

One of the greatest strengths of the KBA initiative is its collaborative nature, which was on display at the event in Ottawa. The event was sponsored by the Royal Bank of Canada and we were joined by many conservation partners, Indigenous representatives, and government officials. The KBA program relies heavily on the knowledge of local naturalists, Indigenous Nations, scientists and others to help us zero in on these key places and develop the evidence required to nominate them as KBAs. KBAs are a conservation blueprint of what we must protect to pass on the richness and diversity of nature to future generations.

"We’ve already had people in all sorts of sectors saying, ‘OK, if this is identified as a key biodiversity area, we might be able to get more funding for this, to be able to steward it better,’” said Ciara Raudsepp-Hearne, director of KBAs at Wildlife Conservation Society Canada to CBC’s What on Earth.

Learn more about KBAs in Ontario in The Globe and Mail, in British Columbia from the
Whales make a move

In a noisy arctic, belugas are looking for quieter routes

When you hear a loud sound, you may cover your ears. If you are a whale swimming in the Arctic Ocean, you may do a U-turn instead. A new study led by Dr. Morgan Martin, post-doctoral fellow with WCS Canada, has documented evasive behaviours by beluga whales in the Arctic Ocean when ships enter their sound space.

Whales turned away or dove when ships were as much as 50 km. away according to the study. That’s not a complete surprise because it has been previously documented that belugas tend toward the flight end of the “flight or freeze” reaction spectrum when faced with a disturbance. What was new was our ability to track their diving behaviour thanks to more advanced technology.

Scientists with Fisheries and Oceans Canada outfitted nine male belugas with tags that could indicate their location and dive depths. Our scientists then calculated the speed and direction of travel of the belugas, and used Automatic Identification System (AIS) data from ships traveling through the study area to see how whales reacted when ships came within 50 km.

The results painted a picture of a strong reaction to ship noise among the tagged whales. Not only did a number of the whales make sharp changes in direction, we also saw changes in diving behaviour, including more V-shaped dives where whales made quick descents and ascents rather than remaining submerged. Others went into shallow dives and swam below the surface away from the source of the noise. Some of the whales that did not change their behaviour were already moving away from the ship when it came within hearing distance.
The belugas also swam faster than average when ships were within the detectable range.

Understanding beluga response to noise is important because fleeing interrupts the individual or group’s current behaviour (e.g., foraging, nursing, resting, transiting), thereby disrupting important daily activities. It can also lead to breakdowns in group communications for these gregarious whales. With climate change rapidly reducing ice coverage in the Arctic, ship traffic is already increasing, meaning more of these noisy encounters lie ahead for whales. More in [Hakai Magazine](https://hakaimagazine.org/whale-watch-canada-can-keep-sharks-swimming/) on this important research.

### Whale watch

In August 2018, whale #2 (dotted lines) was located in the Amundsen Gulf when it encountered the tugboat Kelly Ovayuak, which came within 12.6 km of whale #2 at its closest point. The whale appeared to be foraging, and then made a lateral movement north and away from the ship track as the ship (red line) came near.

[Click the image to watch the animation of this ship-whale encounter](https://hakaimagazine.org/whale-watch-canada-can-keep-sharks-swimming/).

### Canada can keep sharks swimming

*These keystone marine predators need international protection*

![Photo: Ellen Cuylaerts](https://hakaimagazine.org/whale-watch-canada-can-keep-sharks-swimming/)
Roughly 100 million sharks are killed each year in commercial fisheries. Already, an estimated 37% of chondrichthyan species sharks, rays and their relatives are threatened with extinction – the second highest rate among all vertebrate groups (after amphibians).

That’s why WCS Canada is calling on the Canadian government to support proposals to cast a wider net of protection for threatened sharks at the upcoming Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) conference. Canada has been a leader in adopting shark conservation measures, including world-leading measures to ban the trade in detached shark fins in this country. It has also led the way on a ban on the retention of North Atlantic shortfin mako shark that are caught by commercial or recreational fishing and has supported a proposal for a similar ban for the Greenland shark. Canada has about 35 species of sharks – ranging from the tiny deep-sea cat shark to the massive basking shark, and many of these species are declining.

We are urging the federal government to now support proposals being put forward by other countries to list requiem sharks (Family Carcharhinidae), hammerhead sharks (Sphyrindae spp.) that are not already listed, and all species of guitarfishes (Rhinobatidae spp.) on the CITES treaty’s species list. These family-level listings reflect the widespread threats facing sharks and rays, from overfishing to climate change, and the need to focus on more than individual species.

A CITES listing can ensure that any attempts to sell products derived from these sharks can be tightly regulated and controlled. Right now, only 25% of the international shark fin trade comes from species listed under CITES, which must change if we want these ancient predators to survive. WCS Canada, and the entire WCS family, is also calling on Canada and other governments to adopt additional measures for the conservation of several species of mammals, birds, reptiles, and amphibians.

Do your part for sharks and rays with one click!

Urge CITES Parties to vote YES and adopt the CoP19 shark and ray proposals this November

FACT: Only 25% of the #GlobalSharkTrade is currently subject to sustainable trade limits.
#CITESCOP19 can change the face of shark conservation by reducing the pressure on commercially valuable shark and ray populations.

Vote YES for @CITES Nov 14-25

CLICK TO TWEET

37 species of guitarfish need our help!
I urge @CITES Member Countries to protect them from the devastating impact of unsustainable trade.

#CITESSharks #LimitTradeSaveSharks #CITESCoP19

CLICK TO TWEET

The bonnethead shark and five hammerhead species need our help!
I urge @CITES Member Countries to protect them from the devastating impact of unsustainable trade.

#CITESCoP19 #LimitTradeSaveSharks #GlobalSharkTrade #CITES4Sharks

CLICK TO TWEET

Thank you for 10 years of impactful support

November 29 is the 10th anniversary of Giving Tuesday, which means we will be celebrating a decade of our generous supporters stepping up to make a difference for wildlife and to help protect wild places across Canada. Thank you for making the past ten years a huge success!
Thank you for giving bats a fighting chance against a deadly disease. Thank you for contributing to our scientists’ efforts to study elusive wolverines so we can better protect them. Thank you for helping us advocate for caribou and for increased habitat protection. Thank you for creating the opportunity for us to support Indigenous-led conservation and for standing with us in our fight against climate change!

We have another challenging decade ahead of us and we can’t do it alone. Together we can work toward achieving our ambitious goals to protect wildlife and wild places for future generations. This giving season, we thank you for making a difference and for taking action to support wildlife and wild places!

STAND FOR WILDLIFE TODAY

Top banner image: Beluga (Canva Images)